

AMENDMENT UNDER 37 C.F.R. § 1.114
U.S. Application No. 09/848,503

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A multimedia device in a multimedia system, the multimedia device comprising:

a backplane including a plurality of connectors provided thereon, each of the connectors having a predetermined signal standard;

an extension board, which is electrically coupled to a first one of the connectors of the backplane, for transmitting an MPEG transport stream processed by an independent module of the extension board when the extension board is selected; and

a main board unit, which is electrically coupled to a second one of the connectors of the backplane, for processing the MPEG transport stream transmitted by the extension board into a predetermined signal form, and selecting the extension board;

wherein each of the main board unit and each of the extension board electrically coupled to the connectors of the backplane includes:

a transmission signal line for a transmission signal for transmitting a control command of the main board to the extension board;

an MPEG transport stream line for an MPEG transport stream;

an analog audio/video signal line for an analog audio/video signal; and

a selection signal line for a selection signal for selecting the extension board.

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2. (currently amended): A multimedia device in a multimedia system, the multimedia device comprising:

a combination main board unit including a backplane formed of a plurality of connectors, each of the connectors having a predetermined signal standard, and a main board for processing a multimedia input signal into a predetermined signal, wherein the backplane and the main board are integrally formed as a single unit; and

an extension board, which is attachable to any one of the connectors of the backplane, separately from the combination main board, for performing extended functions, the extension board transmitting the MPEG transport stream when the extension board is selected by the main board;

wherein each of the combination main board and each of the extension board attached to the connectors of the backplane includes:

a transmission signal line for a transmission signal for transmitting a control command of the main board to the extension board;

an MPEG transport stream line for an MPEG transport stream;

an analog audio/video signal line for an analog audio/video signal; and

a selection signal line for a selection signal for selecting the extension board.

3. (canceled).

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4. (previously presented): The multimedia device of either claim 1 or 2, wherein the main board or the combination main board comprises:

- an MPEG transport stream decoder for decoding the MPEG transport stream into an MPEG video bit stream and an audio bit stream;
- an MPEG video decoder for decoding the MPEG video bit stream generated in the MPEG transport stream decoder into an analog video signal;
- an audio decoder for decoding the audio bit stream generated in the MPEG transport stream decoder into an analog audio signal; and
- a control unit for selecting one of the extension boards, operating the MPEG TS decoder, the audio decoder, and the MPEG video decoder if the MPEG TS data is input from the extension board, and selectively outputting a multimedia signal.

5. (previously presented): The multimedia device of either claim 1 or 2, wherein the extension board includes a module unit for transmitting a transport stream or an analog audio/video signal to the backplane if the extension board is selected by a control command from the main board or the backplane.

6. (previously presented): The multimedia device of either claim 1 or 2, wherein the extension board comprises:

- a memory for storing a program to be executed by the main board or the backplane; and

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a module unit for transmitting the transport stream or analog audio/video signal to the backplane or main board if the extension board is selected by a control command from the main board, according to the program stored in the memory.

7. (previously presented): The multimedia device of either claim 1 or 2, wherein the extension board comprises:

a module unit for transmitting a transport stream or analog audio/video signal to the backplane or the main board according to the control command;
an extended control unit for receiving a command from the main board if the module unit is selected by the main board, controlling the module unit, and then transmitting the result of executing the command to the main board; and
a memory for storing a program to be executed by the extended control unit.

8. (previously presented): The multimedia device of claim 7, wherein if an operation command from the main board is received, the extended control unit transmits menu items in the form of an HTML document to the main board to display the menu items on a screen, and if a menu item displayed is selected by the main board, the extended control unit executes a command corresponding to the selected menu item.

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9. (previously presented): The multimedia device of claim 7, wherein if the main board does not select the module unit, the module unit does not transmit a transport stream or an analog audio/video signal.

10. (currently amended): A method for extending functions of a multimedia device having a backplane, a main board, and at least one extension board which may be electrically coupled to the backplane, the method comprising the steps of:

- (a) determining whether the extension board is electrically coupled to one of a plurality of connectors of the backplane by sequentially scanning the connectors;
- (b) analyzing characteristics of the extension board, if it is determined in the step (a) that the extension board is electrically coupled to one of the connectors of the backplane;
- (c) performing functions according to the characteristics of the extension board analyzed in the step (b); and
- (d) displaying a signal corresponding to the function of the extension board performed in the step (c), on a screen,

wherein the main board unit selects the extension board to transmit the MPEG transport stream processed by an independent module of the extension board.

11. (previously presented): The method for extending functions of claim 10, wherein the step (c) further comprises the steps of:

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receiving at the main board an operation command transmitted from the extension board in the form of a menu; and
displaying the received menu on the screen by a web browser, and performing a command corresponding to the displayed menu.

12. (currently amended): A multimedia device in a multimedia system, the multimedia device comprising:

a backplane unit including a plurality of connectors, each of the connectors having a predetermined signal standard; and
a main board unit, which is electrically coupled to a first one of the connectors of the backplane unit, for processing an MPEG transport stream, which is input from an extension board electrically coupled to a second one of the connectors, into a predetermined signal form, and selecting the extension board from which the MPEG transport stream was input;

wherein each of the main board unit each of the and boards electrically coupled to
connectors of the backplane unit includes:

a transmission signal line for a transmission signal for transmitting a control command of the main board to the extension board;
an MPEG transport stream line for an MPEG transport stream;
an analog audio/video signal line for an analog audio/video signal; and
a selection signal line for a selection signal for selecting the extension board.

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13. (canceled).

14. (currently amended): An extension board for multimedia device, which is detachably coupled to one of a plurality of connectors of a backplane and extends functions different from the functions of a main board, the extension board comprises:

a module unit for driving a function extension module and generating a transport stream, and selectively transmitting the transport stream, which is generated in the function extension module, or an analog audio/video signal to the backplane according to a control command;

an extended control unit for receiving a control command from the main board if the module unit is selected in the main board, processing the module unit, and transmitting the result of executing the command to the main board; and

a connector unit for connecting each signal of the module unit and the extended control unit;

wherein each ~~of boards~~ detachably coupled to the connectors of the backplane unit includes:

a transmission signal line for a transmission signal for transmitting a control command of the main board to the extension board;

an MPEG transport stream line for an MPEG transport stream;

an analog audio/video signal line for an analog audio/video signal; and

a selection signal line for a selection signal for selecting the extension board.

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15. (previously presented): The extension board of claim 14, wherein if an operation command from the main board is received, the extended control unit transmits menu items to the main board to display the menu items on a screen, and if a menu item displayed is selected in the main board, executes a command corresponding to the selected menu item.